



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/777,820 Confirmation No.: Unassigned  
Applicant: Collins *et al.*  
Filed: February 12, 2004  
TC/A.AU.: Unassigned  
Examiner: Unassigned  
Docket No.: 11138.105024 MAYO 1001 CON  
Customer No.: 20786  
Title: Cobalamin Conjugates Useful as Antitumor Agents

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450


**Transmittal of Information Disclosure Statement**

Sir:

The citation of information on the attached Form PTO-1449 is made pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98. Copies of references are enclosed for: AA, AV, BD, BK, BL, BM, BN, BO, BR, BX, CA, CB, CL, CM, CO, CP, CQ, CR, CS, CT, CU, CV, CW, DA, DD, DF, DG, DK, DL, DM, EC, ED, EF, EG, EH, EK, EL, EM, EN, EO, FA, FC, FD, FE, FF, FG, FH, FI, FJ, FK, GA, GB, GD, GF, GH, and GJ. Copies of remaining references were cited in the parent application 09/690,197. The Examiner's attention is drawn to copending applications U.S.S.N. 09/690,198, 10/028,857, and 09/690,353. The citation of this information does not constitute an admission of priority or that any cited item is available as a reference, or a waiver of any right the applicant may have under applicable statutes, Rules of Practice in patent cases, or otherwise.

Because this Information Disclosure Statement is being submitted before mailing of a first Office action on the merits, Applicants do not believe any additional fees are due; however, the Commissioner is hereby authorized to charge any fees due or credit any overpayment to Deposit Account No. 11-0980.

Respectfully submitted,

  
Madeline I. Johnston  
Reg. No. 36,174

Dated: May 6, 2004  
King & Spalding, LLP  
191 Peachtree Street, N.E., Atlanta, GA 30303  
Office: (404)572-4600/ Fax: 404-572-5145

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

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of

7

**Complete if Known**

Application Number

10/777,820

Filing Date

February 12, 2004

First Named Inventor

Collins *et al.*

Group Art Unit

Unassigned

Examiner

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Attorney Docket Number

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**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pgs, Clmns, Lns, Where Relevant Passages/Relevant Figs Appear
		Number	Kind Code (if known)			
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	AB	3,936,440	A	Nath	02-03-1976	
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Sheet	2	of	7	Attorney Docket Number	11138.105024 MAYO 1001 CON

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		Number	Kind Code (if known)			
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		Office <sup>3</sup>	Number	Kind Code <sup>2</sup> (if known)				
	BQ	AU	04490099	A1	Biotech Australia Pty. Ltd.	01-05-2000		
	BR	DE	1,811,518		Rhone-Poulenc S.A. [Bouchaudon] <i>Chem. Abstr.</i> 71:91866s (1969)	07-10-1969		
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	BX	WO	92/09610	A1	University of California	06-11-1992		
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	BZ	WO	94/27613	A1	Biotech Australia Pty. Ltd. <i>et al.</i>	12-08-1994		
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	BAB	WO	95/27723	A1	Morgan; Wilbur; Pathare	10-19-1995		

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		Office <sup>3</sup>	Number	Kind Code <sup>2</sup> (if known)				
	CA	WO	96/04016	A1	Amgen Inc.	02-15-1996		
	CB	WO	96/27641	A1	BioTech Australia	12-08-1994		
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	CQ	WO	02/042318	A2	Collins; Mayo Found.; U. Minn.	05-30-2002		
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	CT	WO	03/025139	A2	Mayo Found.	03-27-2003		

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				T 6
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	CU	ALAM, G. <i>et al.</i> , "Boronated compounds for neutron capture therapy," <i>Strahlentherapie und Onkologie</i> , 165(2/3):121-123 (1989).		
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	CX	AMAGASAKI, T., <i>et al.</i> , "Expression of transcobalamin II receptors by human leukemia K562 and HL-60 cells," <i>Blood</i> , 76(7):1380-1386, (October 1, 1990).		

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	DA	ANTON, D.L., <i>et al.</i> , "Carbon-13 nuclear magnetic resonance studies of the monocarboxylic acids of cyanocobalamin. Assignments of the B-, D-, and E-monocarboxylic acids," <i>J. Am. Chem. Soc.</i> , 102(7):2215-2219 (March 26, 1980).	
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	DG	BROAN, C. J., <i>et al.</i> , "Synthesis and complexation behaviour of an effective octadentate complexone 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetrakis[methylene(methylphosphinic acid)]," <i>J. Chem. Soc. Chem. Comm.</i> , 23:1739-1741 (1990).	
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	DJ	COOPER, B.A., <i>et al.</i> , "Selective uptake of specifically bound cobalt-58 vitamin B12 by human and mouse tumour cells," <i>Nature</i> , 191, 393-395 (July 1961).	
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	DM	FAIRCHILD, R.G., <i>et al.</i> , "Current status of 10-B-neutron capture therapy: enhancement of tumor dose via beam filtration and dose rate, and the effects of these parameters on minimum boron content: A theoretical evaluation," <i>Int. J. Radiation Oncology, Biology, Physics</i> , 11(4):831-840 (April 1985).	

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	EA	FINKLER, A.E., <i>et al.</i> , "Nature of the relationship between vitamin B12 binding and cell uptake," <i>Arch. Biochem. Biophys.</i> , 120(1):79-85 (April 1967).	6
	EB	FLODH, H., <i>et al.</i> , "Accumulation of labelled vitamin B12 in some transplanted tumours," <i>Int. J. Cancer</i> , 3(5):694-699 (September 15, 1968).	
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				Application Number	10/777,820
				Filing Date	February 12, 2004
				First Named Inventor	Collins <i>et al.</i>
				Group Art Unit	Unassigned
				Examiner Name	Unassigned
Sheet	6	of	7	Attorney Docket Number	11138.105024 MAYO 1001 CON

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	FA	LASTER, B.H., <i>et al.</i> , "Biological efficacy of a boronated porphyrin as measured in cell culture," <i>Strahlentherapie und Onkologie</i> , 165(2/3):203-205 (1989).	6
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	GA	ORDER, S.E., <i>et al.</i> , "Use of isotopic immunoglobulin in therapy," <i>Cancer Res.</i> , 40:3001-3007 (August 1980)	6
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